LOADER

MX T406
MX T408
MX T410
MX T412
MX T417
MX T418

User manual

Please read carefully before using MX loader

UK 366579 AA - 0313
Original instructions

Dear users,

Thanks you for confidence in our product. We are sure it will give you full satisfaction.

By taking a few minutes to read this manual, you will be able to obtain the best results from your MX loader, extend its lifespan and work in complete safety.

The loader user manual is a very important document, please keep it with you in order to be able to use it if required. Leave it available to any other user and give it to the next owner of this loader.

Pictures and technical information included in this document may not correspond precisely to your loader; but the working conditions will be the same.

The loader should be subject to handover from the dealer to the user.

The demonstration of the equipment to be delivered should include:

— The safety rules.
— Hitching and unhitching the loader.
— Hitching and unhitching the work implement.
— Full use of the controls.

In the event that one of these four necessary items is omitted, you should immediately contact your dealership.

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* depending on equipment

The loader is a complex machine. The end user must read this instruction book before first use.

Familiarise yourself with

— Safety instructions.
— Hitching and unhitching of the loader.
— Hitching and unhitching of the implements.
— Full use of the controls.

1. SAFETY INSTRUCTIONS

— Control the loader only from the driver's seat. Do not let go of the controls until the movements are complete.
— Do not leave the seat before locking the controls to prevent any movement.
— Never leave the tractor while its loader is lifted. Following loader use, park the tractor with the loader lowered to the ground.
— It is compulsory to ensure that nobody is in the area while the loader is in use (see chapter "SAFETY DEVICE ON LIFTING/CROWDING")
— The operation must use the implement designed and recommended by MX for the work to be carried out.
— The transport or elevation of persons using the loader is forbidden.
— Ensure tractor stability by using a counterweight. Please check the information regarding the counterweight in this user manual.
— Restrict all movements while the load is lifted as the tractor may become unbalanced.
— The maximum front axle safe load provided by the tractor's manufacturer must not be exceeded.
— The maximum front tyres safe load provided by the tyres's manufacturer must not be exceeded.
— Check regularly tyres pressure.
— Regularly check the presence of safety pins and bolts. Do not replace with any other object such as nails, wire, etc.
— Hitch the loader only to a tractor fitted with a roll-over protective structure (ROPS) or a falling object protective structure (FOPS). This should be in the protective position when using the loader.
— Watch out for overhead electrical and telephone cables when manoeuvring with the loader in the raised position.
— In compliance with the standard EN 12525, the controls for operating the loader and implements must be of the "sustained action" type with the exception of the lift floating position which can be maintained in its position by a notching system.
— Any activity relating to defect investigation (diagnosis) and / or disassembly of parts may only be undertaken by an accredited professional who shall assure his safety and the protection of the environment in which the actvity is conducted, in particular in the event of an activity involving the loader staying in the lifted position.

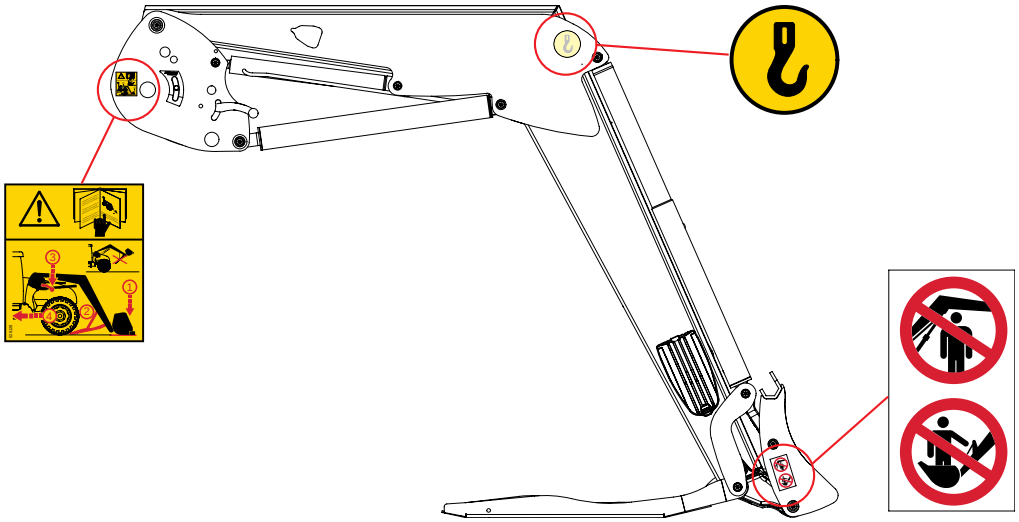
CAUTION !

— The loader's hydraulic circuit is designed to have a maximum service pressure of 200 bar.
— Never modify hose connections.
— The breaking of the seals will result in the cancellation of the MX responsibility for all the equipment supplied.
— The assembly of an MX loader which excludes the recommendations in the MX price list in force at the purchase date, cancels the MX guarantee on all the equipment supplied.
— Any modification to a section of any MX equipment (implements, loader, bracket, etc.) or the use of an implement or element installed on the MX loader of foreign origin, cancels the MX guarantee for all equipment supplied.
— Use only MX original spare parts. Do not modify your MX loader or its accessories yourself or have another person modify them (mechanical, electrical, hydraulic, pneumatic characteristics), without prior written agreement from MX. Failure to respect these regulations may make the loader dangerous. MX will disclaim all responsibility in the event of damage or injury.
— The guarantee is immediately invalid when the instructions for use, and the MX loader maintenance schedule outlined in "User Manual" are not observed.

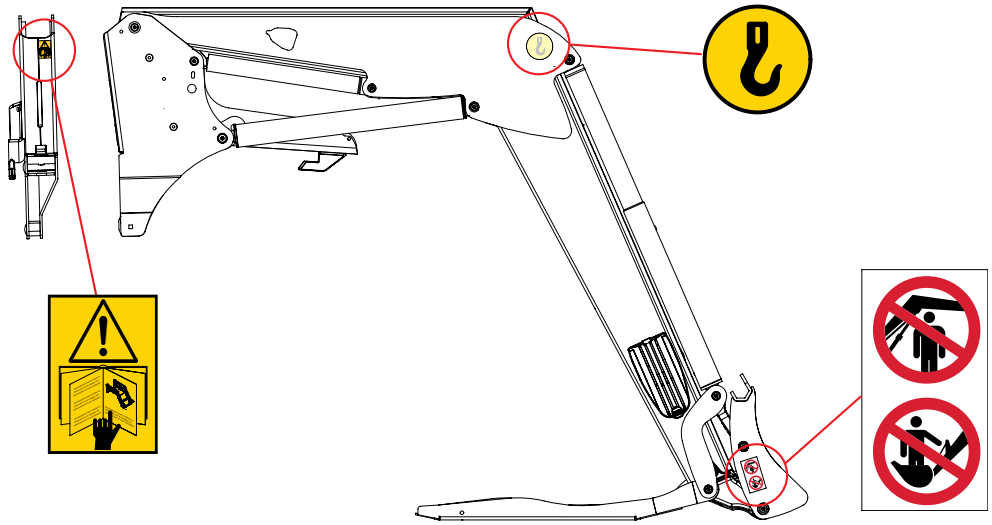
2. SAFETY STICKERS

Security stickers are located on the loader. Keep them readable and clean, and change them if damaged.

— **MXT400 loaders** (with AD05 bracket):



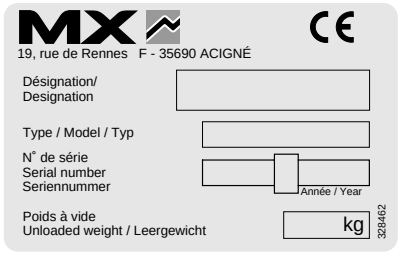
— **MXT400s loaders** (with AD90 bracket):

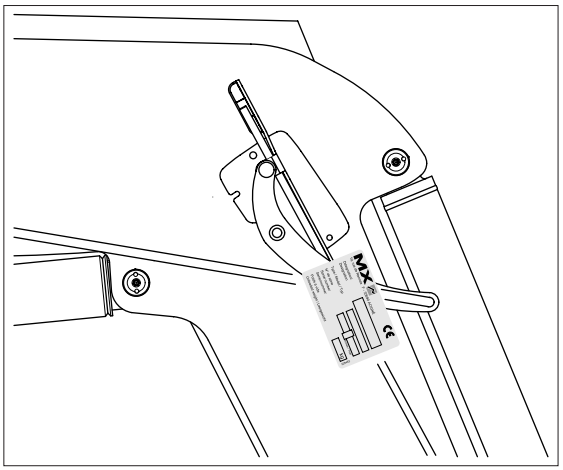


	Familiarise yourself with the safety rules in the user manual before using or working on the loader. Follow the loader hitching and unhitching procedure given in the user manual.
	Use the anchoring points when handling the loader.
	Handling above people is prohibited. It is prohibited to use the loader and its implements for any other purposes than handling the materials it was designed for.

3. IDENTIFICATION PLATE

The identification plate is located inside the LH arm, next to the implement level indicator.





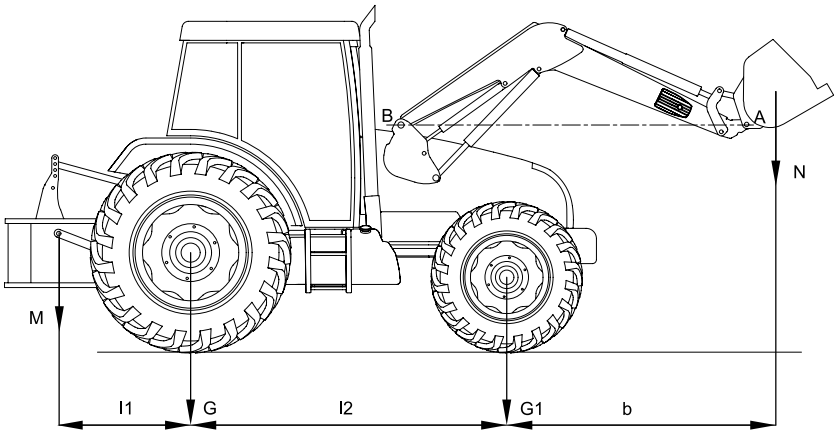
The serial number and loader type which are indicated on this plate might be requested when requiring spare parts or technical assistance.

4. COUNTERWEIGHT

The stability of the tractor and loader can only be ensured with a counterweight on the rear of the tractor. This counterweight must ensure that a minimun of 20 % of the total weight (Tractor, loader, implement, maximum load and counterweight) is applied on the back axle of the tractor in order to work in a safe condition.

Below is the calculation method which indicates the required counterweight (M) (standard EN12525 + A2 2010).

$$M \geq \frac{5\,N\,b + I2\,(P + N - 5\,G)}{5\,(I1 + I2) - I2}$$



G : Weight on the rear axle, wihtout counterweight, with an empty implement (kg).
G1 : Weight on the front axle, without counterweight, with an empty implement (kg).
b : Distance from the front axle to the implement centre of gravity (mm).
I1 : Distance from rear linkage pins to the rear axle (mm).
I2 : Wheelbase.
N: Usable load of the loader for implement pivot point (A) horizontal with the loader pivot point (B) (kg).
P : G + G1 (kg)
M : Weight of the counterweight (kg).

5. LOADER UNHITCHING

You will also find a video showing the unhitching/hitching on www.m-x.eu

This operation must be carried out by the driver who must leave the seat and ensure all manoeuvres are forbidden while he is working on the loader.

The loader must **always** be coupled to an implement to unhitch it.

— Choose a flat and stable area.

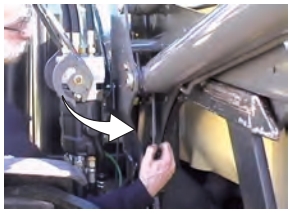
— Lower the loader with double acting in order to slightly lift the front axle of the tractor, with the implement horizontal to the ground. Actuate in notched floating position, then back to neutral. The lift rams will be filled both sides with oil and involuntary movements of the loader will be limited when the loader has prolonged exposure to the sun and will ensure the hitching is correct.

— Pull the parking brake. Turn off the engine

— Get out of the tractor.

— On the left side, pull the unlocking handle sharply downwards.
The locking indicator is in the red zone.

MX T400s loaders:
On the left and right hand, unlock taper pin by pulling the lever forward.
Push the lever upwards with your palm until it engages in parked position.



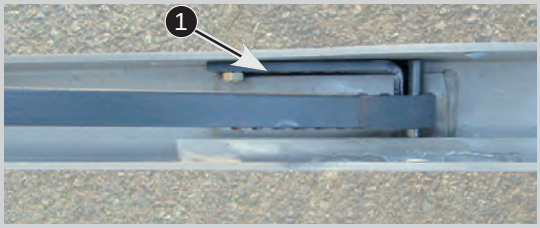
— Lower the left and right parking stands.

Setting the parking stands at the time of first use

1. Place the implement flat on the ground

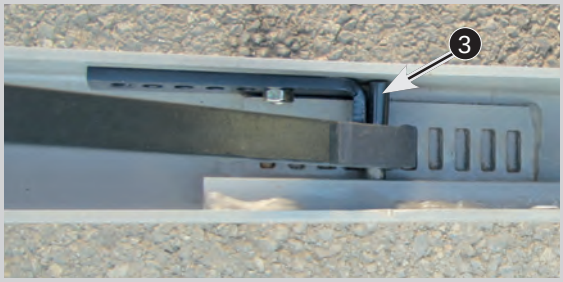
2. Lower the parking stand

3. Remove the rod stop ❶ and position the parking stand on the ground.



4. Select a notch ❷ that provides a distance of between 3 and 5 cm with the ground when you manually raise the parking stand.

5. In this position, lift the stop to meet the locking pin ❸.



6. Perform the same process for the other parking stand

— Disconnect the hydraulic's and electric's.

Loader with MACH System

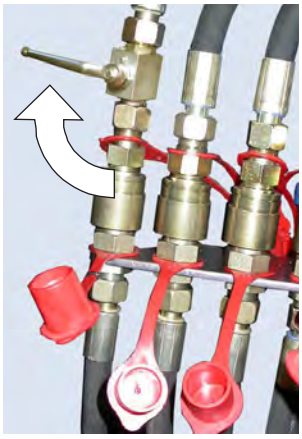
— Release the MACH System housing by pushing the locking pin on the LH side and lifting the handle up.

— Hook the MACH System on the support.

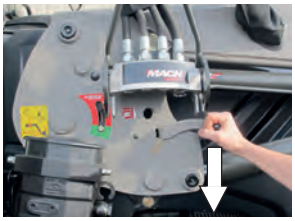
Loader without MACH System

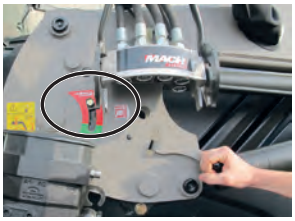
— Close the tap and disconnect the couplings.

— Position the protective covers (clean) to the male and female couplings. Store the hoses on the loader.

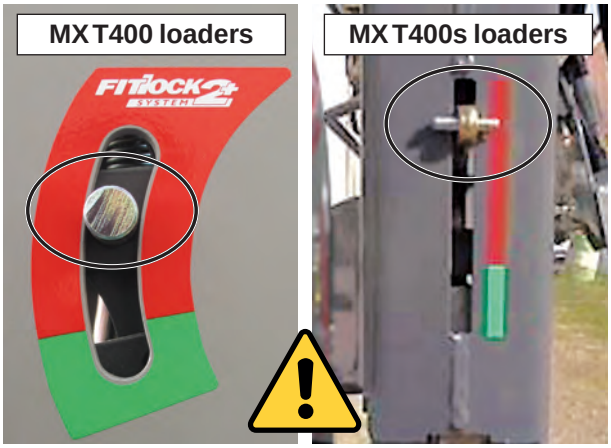


— On the right side, pull the unlocking handle sharply downwards.
The locking indicator is in the red zone.





— Return to the driver's cab.
Check on the left and right hitching frames that the locking indicators are in the red zone.



— Reverse the tractor first with a rapid movement, then more slowly until the loader rests on its stands

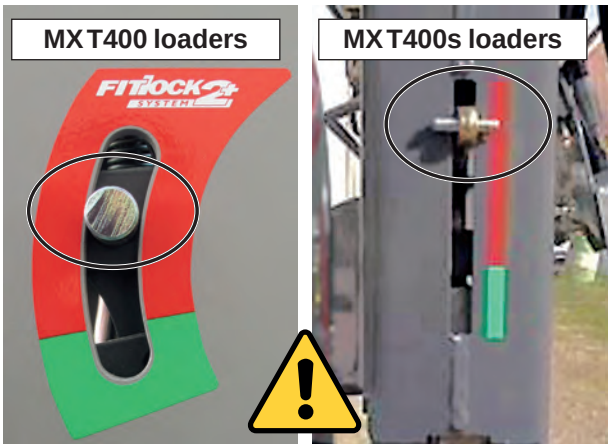
— Check the loader's stability.

6. ATTELAGE DU CHARGEUR

You will also find a video showing the unhitching/hitching on www.m-x.eu

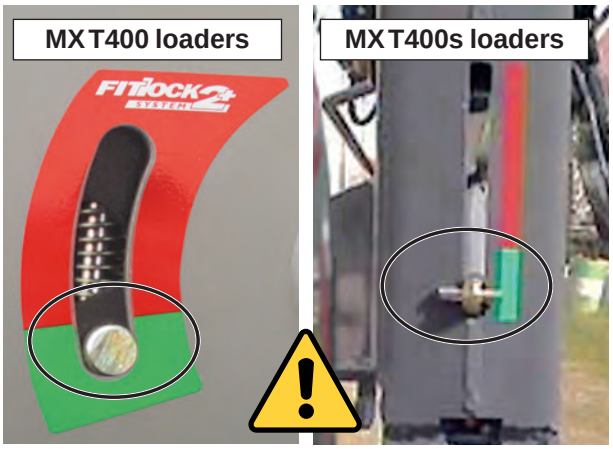
— Check on the L.H. / R.H. side beams that **the locking indicators are in the red area** and that no object will obstruct the loader hitching.

— The bracket are designed with a roller and a ramp which will lift the loader when hitching.



— Drive the tractor forward in order to guide the loader frame on to the brackets until the catches are automatically triggered.

— **The loader is locked when indicators are in the green area.**

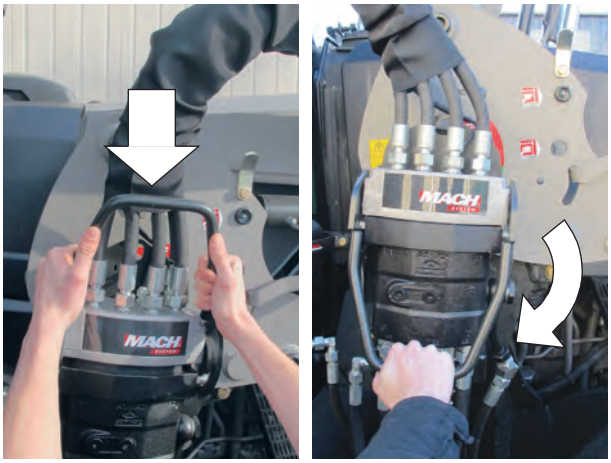


If the indicators are still in the red zone, refer to the "Two step hitching" section.

— Connect the hydraulic's and electric's.

Loader with MACH System :

— Hold the housing with two hands and using the back of the housing lift the valve cover and fit the guide bars vertically into place.



Loader without MACH System:

— Remove the plastic covers on the couplings.

— Connect the couplings.

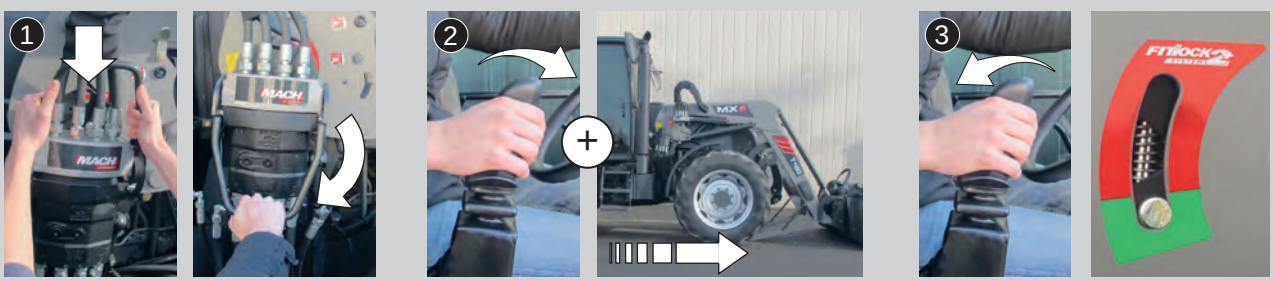
— Open the tap.

— Raise and lock the right and left parking stands.
Check that each parking stand is correctly locked.

— Checking before work :
Press on the ground with an implement to check if loader is correctly hitched on the tractor. Use D.A. mode.

Two step hitching

1. Connect the hydraulic's and electric's ❶.
2. Move the lever forwards to the notched floating position + Moving the tractor forward ❷. If necessary turn the wheels.
3. Operate lifting movement slightly ❸. **The loader is locked** (Indicators in the green).
4. Raise and lock the right and left parking stands.
5. Checking before work : Press on the ground with an implement.



7. IMPLEMENT UNHITCHING

This operation must be carried out by the driver who must leave the seat and ensure all manoeuvres are forbidden while he is working on the loader.

7.1 Implement carrier with manual unlocking

— Select a stable parking area.
— Lower the implement horizontally to 0.30 m from the ground,
— Pull on the handbrake,
— Turn off the engine,
— Decompress the loader's hydraulic lines feeding the implement.

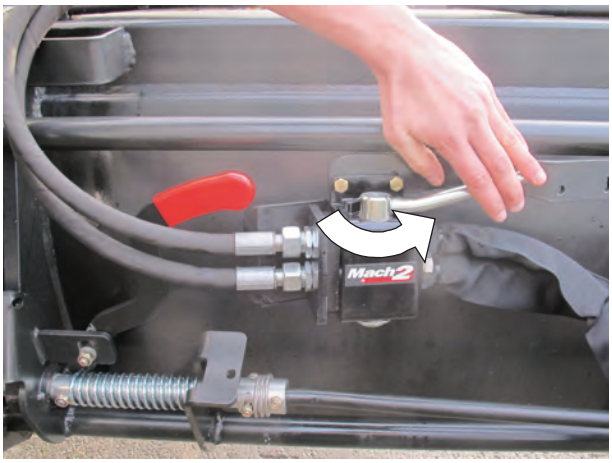
NOTA : When loader fitted with one or several solenoid valves, leave contact on and pressing the buttons.

— Disconnect the hydraulic's

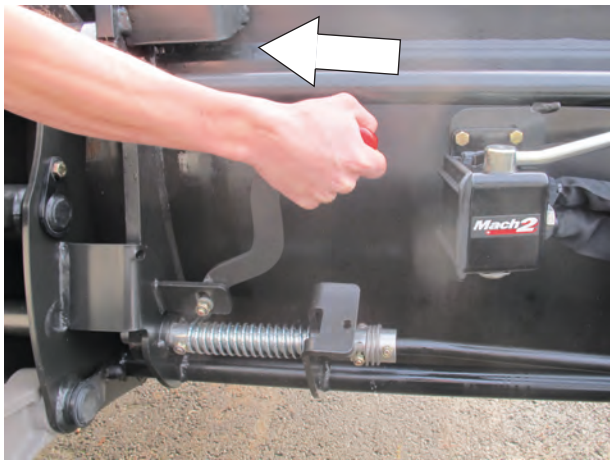
  — MACH 2: disconnect.

  — Couplings: disconnect and place plastic caps on the male and female couplings.

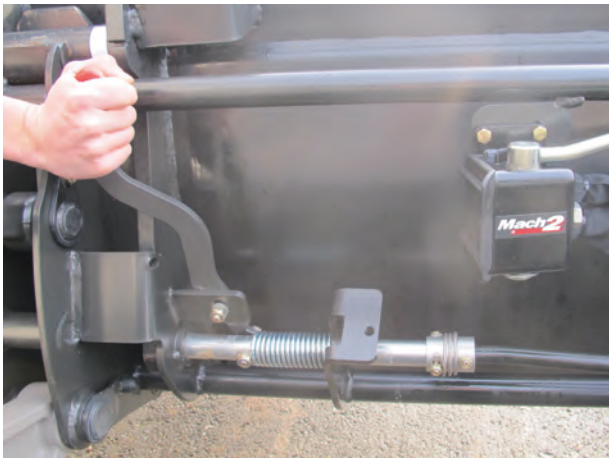
— Place the hoses on the front of the implement.



— Implement unhitching.
From the L.H. side of the loader, pull on the lever to the end.
Never operate from the front of the implement.



— Pull the lever towards you until it stays engaged.



7.2 FAST LOCK implement frame carrier

— Raise the loader to lift the implement off the ground.
— With the implement horizontal, press the green and orange buttons while moving the crowd lever to the right (dumping). The implement is now unlocked.
— Place the implement on the ground by slightly tipping it to free the implement carrier from the implement.

NOTE : If the implement has one or more hydraulic functions, firstly disconnect the hoses.

7.3 SPEED LINK 2 implement frame carrier

— Raise the loader to lift the implement off the ground. In order to maximise the hydraulic components life, take care that the implements hydraulics are not at pressure before disconnecting. Slightly open the grab for example.
— Press the green and orange buttons while moving the crowd lever to the right (dumping). The implement is now unlocked. The locking indicator at the back of the Speed-Link 2 frame is red.
— Place the implement on the ground by slightly tipping it to free the implement carrier.

NOTE : Using an implement with one D/A hydraulic service, but without Speed-Link 2 plug is possible. If necessary, disconnect the hydraulic couplings at the back of the Speed-link 2 frame once the pressure has been released.

8. IMPLEMENT HITCHING

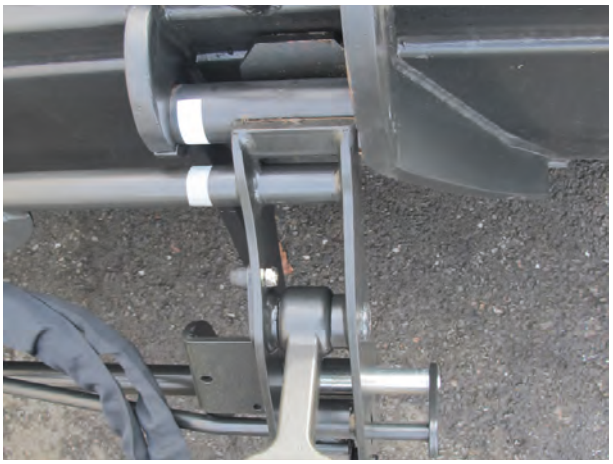
This operation must be carried out by the driver who must leave the seat and ensure all manoeuvres are forbidden while he is working on the loader.

8.1 Implement carrier with manual unlocking

— Check the unlocking lever is in the hitching position (lever turned backwards). Locking pins are retracted, springs are compressed.

CAUTION: check implement hoses are away from hitching area.

— Approach the loader towards the implement.
— Slot onto the implement's hitching brackets.
— Crowd the implement back while driving forwards until the unlocking lever is triggered.



— Turn the engine off.
— Decompress the loader's hydraulic lines feeding the implement.
NOTE : If the loader is fitted with a solenoid valve, with turned on the contact and press the control button.

— Connect the couplers when implement with hydraulic functions.

8.2 FAST LOCK implement frame carrier

— Before attaching the implement, ensure that the locks are in the "open" position to allow the implement's parts to pass.
— Move the loader along the axis of the implement,
Drive the implement carrier into the implement,
Gently crowd and raise the loader to lift the implement from the ground.
— Press the green and orange buttons by moving the crowd lever to the left (crowd).
The implement is now locked.

NOTE : If the implement has one or more hydraulic functions, connect the hoses.

8.3 SPEED LINK 2 implement frame carrier

— Before connecting an implement, take care that the pins are in the "open" position. The locking indicator at the back of the Speed Link 2 frame is red.
— Drive the implement carrier into the implement, gently crowd and raise the loader to lift the implement from the ground.
— Press the green and orange buttons while moving the crowd lever to the left (crowd). The implement is now locked.
The locking indicator is green.

NOTE : Using an implement which has no Speed Link 2 plug but has one D/A hydraulic service is possible. If required, plug the couplings at the back of the Speed-Link 2 frame once the 3rd function circuit pressure has been released .

Checking before work:

Press on the ground to check if implement is correctly locked on the loader. Use D.A. mode. Manoeuvre each hydraulic service to its maximum, in each direction to check the correct operation of the hydraulic system and that there are no leaks.

9. IMPLEMENT CARRIER FRAME MODELS

9.1 MX Master-Attach implement carrier frame

9.2 Euro implement carrier frame

9.3 MX Master-Attach / Euro implement carrier frame

To switch from the MX Master-Attach ❶ position to the Euro position ❷ ,

- Remove the pins,
- Tilt the hitch shoes downwards,
- Ensure that the hitch shoes are kept in position by the spring rods,
- Put the pins back to their initial position.

9.4 Euro / SMS / ALÖ3 implement carrier frame

To switch from the SMS (1) or ALÖ3 (2) position to the Euro (3) position,

— Remove the split pins then the pins,

— Take the hitch shoe and position it by rotating it through 180°,

— Proceed in the same manner for the second hitch shoe.

9.5 MX Master-Attach / Faucheux-Blanc implement carrier frame

To switch from the MX Master-Attach position (1) to the Faucheux-Blanc position (2),

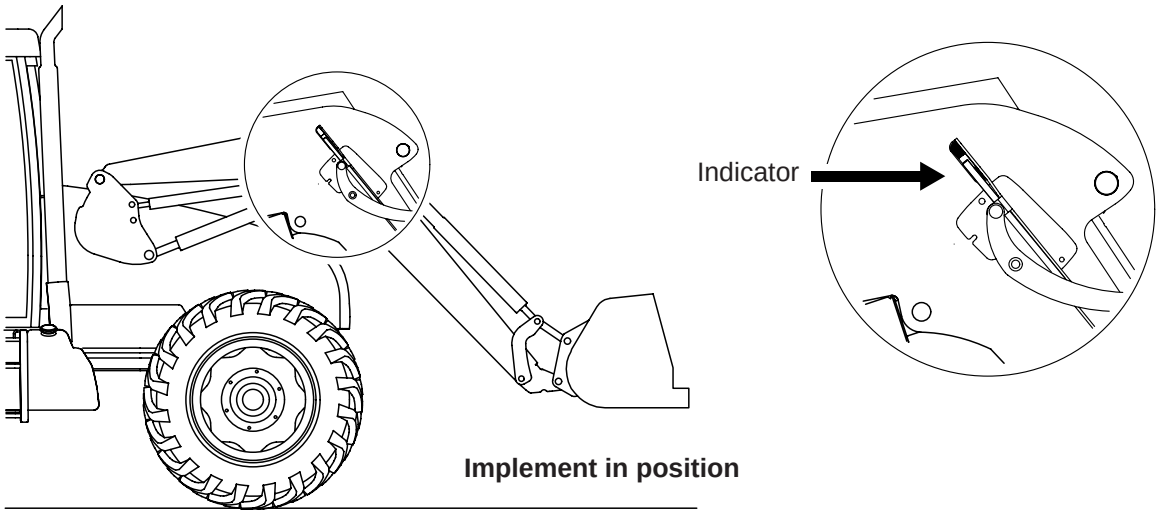
— Remove the hitch shoes from their storage position,

— Fit them in the hitching position and add the 4 attachment pins,

— Fit the lynch pins to the attachment pins.

10. IMPLEMENT LEVEL INDICATOR

The implement level indicator is useful for implement repositioning. Efficient even while lowering the loader, it is adjustable depending on the implement type.

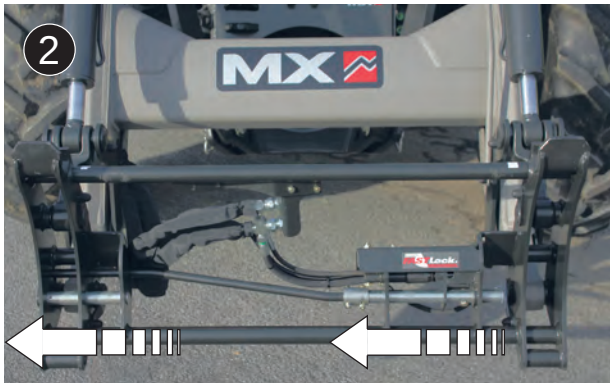


Implement in position

11. FAST-LOCK SYSTEM *

The FAST-LOCK System (*optional) on the implement carrier allows tools to be hitched and unhitched without hydraulic or electrical operation from the driver's cab.

Locked position ❶.
Released position ❷.



12. SPEED-LINK 2 SYSTEM *

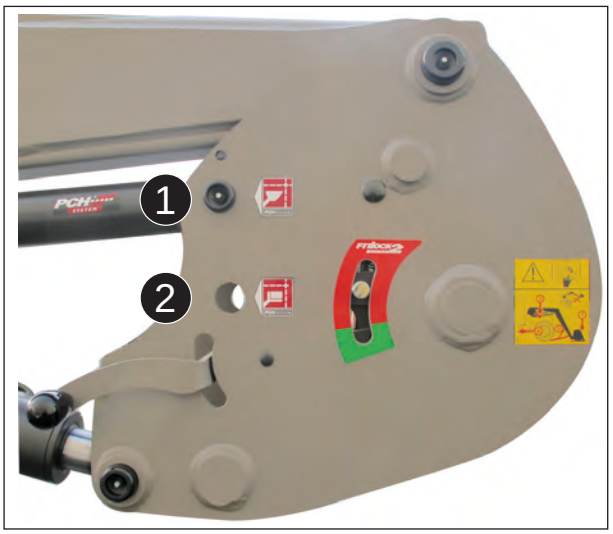
The SPEED-LINK 2 System (*optional) on the implement carrier allows tools to be hitched and unhitched without hydraulic and electrical operation from the driver's cab.

SPEED-LINK 2 equipment (loader side) ❶.
SPEED-LINK 2 equipment (implement side) ❷.

A red/green indicator on the back of the SPEED-LINK 2 box lets the driver in the cab know the implement's locking status.

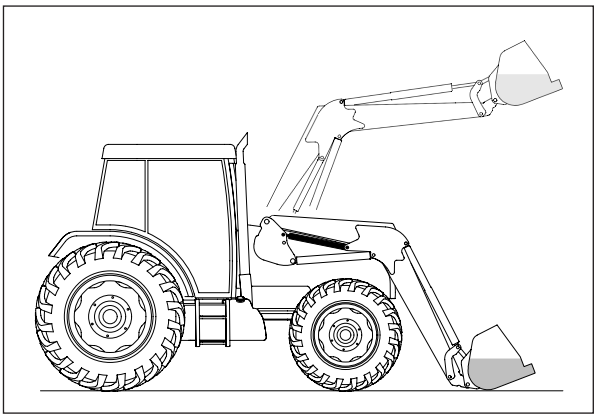
13. SELF LEVELLING, PCH System *

The hydraulic compensating parallelogram system operates automatically (* option).
The system is equipped with safety hydraulic componants that should not be modified under any circumstances.



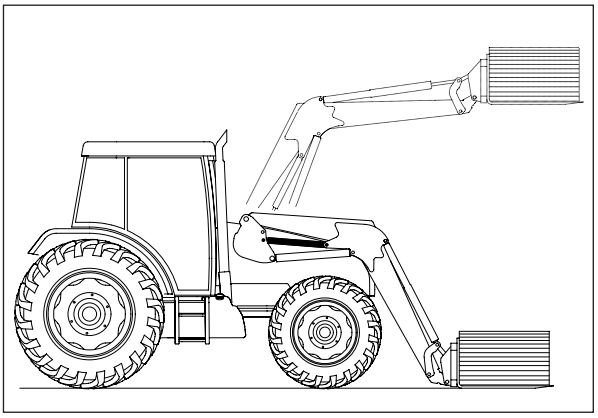
13.1 "Bucket" Position 1

When the loader is being raised or lowered, the PCH system keeps the implement in the best suited position. i.e. the loaded material does not fall forwards or backwards.



13.2 "Pallet" Position 2

When the loader is being raised or lowered, the PCH system maintains the pallet carrier in a horizontal position. i.e. the material loaded level at ground level is maintained in the horizontal position while lifting.



14. SHOCK ELIMINATOR SYSTEM *

Shocks are eliminated when moving the loader or when it stops suddenly when being lowered (* option).
This system softens jolting on the tractor and therefore jarring in the cab.

The Shock Eliminator can be isolated using the valve ❶ .

Without SHOCK ELIMINATOR | With SHOCK ELIMINATOR

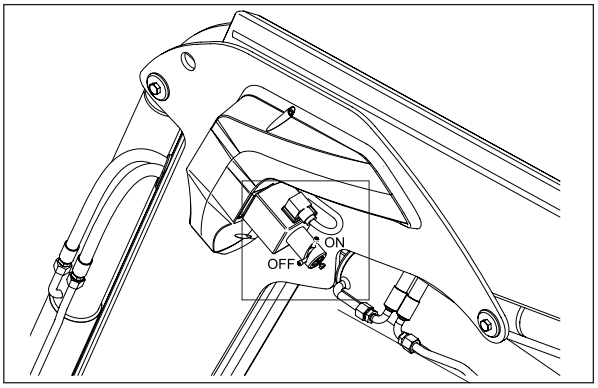
The Shock Eliminator can be enabled or disabled directly from the cab.

15. CROWD SYSTEM SPEED RESTRICTOR *

The crowd speed restrictor (* option) is located at the bottom of the 3rd service solenoid valve, inside the R/H loader arm.

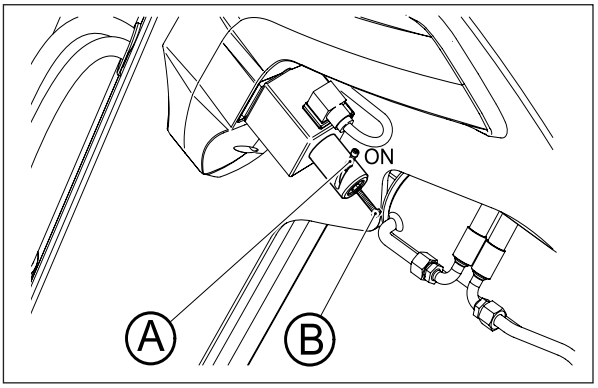
15.1 ON / OFF

— ON : restrictor is activated, Crowd system has low speed.
— OFF : restrictor is not activated. Crowd system operates normal speed.



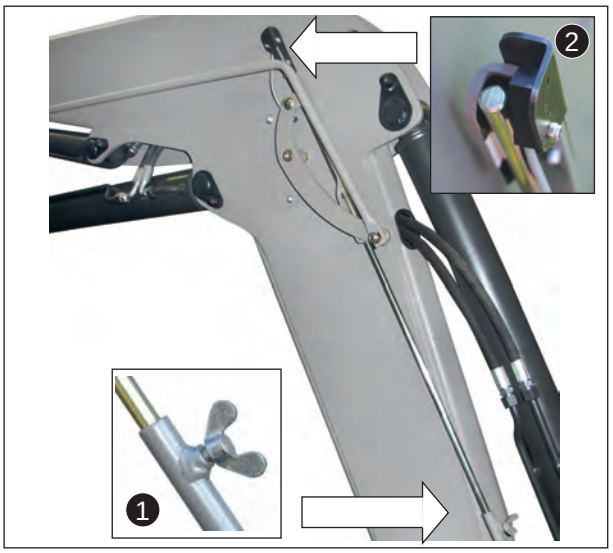
15.2 Adjustment

— Place lever in position "ON",
— Un-tighten nut A.
— Adjust crowd system speed with screw B.
— Re-tighten nut A.
— Check speed after adjustment.



16. ACS *

The automatic upgrade of the ACS tool (option) is available for loaders that are controlled by the original control valve of the tractor or the MX "Flexpilot" or "Techpilot" control valves.

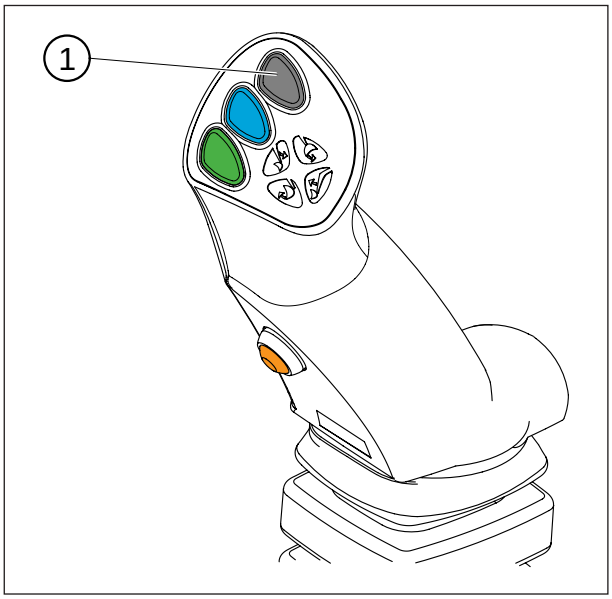


16.1 Adjustment of implement position

The setting of the implement positon is made with the implement level indicator rod. See diagram.

— Place implement in position,
— Lay implement down on the ground,
— Unscrew the screw 1 .
— Place rod end in front of the sensor 2 .
— Tighten screw again 1 .

16.2 Automatic implement position return



Flexpilot control:
The ACS operates in the crowding direction.

— Implement in dumped position, press and hold the black button (1) of the joystick: implement stops automatically when preset position is reached.
— Release the black button (1).

Techpilot control:
ACS works both ways: crowding and dumping. If implement stays in dumped position, loader will crowd.

— If implement stays in crowded position, loader will dump.
— Press and hold the black button (1) on the joystick: implement stops automatically when preset position is reached.
— Release the black button (1).

Using the factory-fitted control valve on the tractor:
The ACS operates in the crowding direction.

— When the tool is dumped, press and hold the ACS function button** on the loader control lever and crowd (left-hand lever): the tool automatically stops at the pre-set position.
— Release the button and bring the lever into neutral.

** Please refer to the electrical wiring harness assembly instructions.

17. SCS *

Synchronisation bucket/grab (* option) works both ways:
— Grab opening / bucket dumping.
— Bucket crowding / grab closing.

SCS works only when loader has 3rd function.

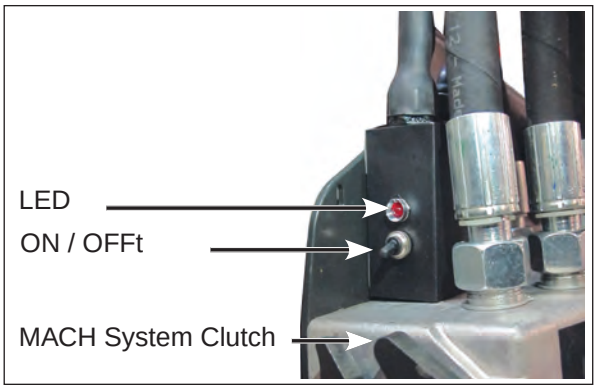
17.1 SCS ON / OFF

An ON/OFF switch is located on the MACH SYSTEM. An LED indicates to the driver in his cab if SCS is ON or OFF.
— LED ON : SCS in service.
— LED OFF : SCS OFF.

17.1.1 Chargeur avec porte-outil SPEED-LINK 2

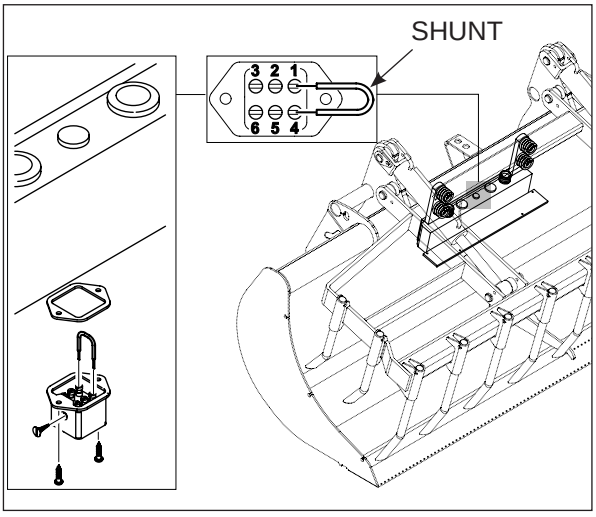
A system located inside the SCS compatable Speed Link plug on the implement will make the automatic activation of the system when connecting the implement.

Note: The switch located on Mach System indicates if the SCS is ON or OFF depending on the implement specification (SCS compatible or not). If it is required to disconnect SCS when using SCS compatable implement, please toggle the switch.



17.2 SCS driving

SCS is opperated through the same button as 4th function and crowding or dumping.
— Grab opening / bucket dumping : press 4th function button + dumping
— Bucket crowding / grab closing : press 4th function button + crowding.



Remarks:
— In order to optimise the SCS when loading a trailer, it is recommanded to start the system when the implement arrives at the level position.
— If grab is fully opened before bucket fully is dumped, release 4th function switch to continue dumping.
— If bucket is totally dumped before grab is fully opened, use 3rd service to open the grab.

18. SAFETY DEVICE ON LIFTING/CROWDING *

This device is essential for working when people are present near the load (*option).
In compliance with the EN 12525 + A2 2010 standard, it can be disengaged for working when no one is near the load.
The movements can then be carried out, with no loss of power or speed of execution.
Unique, this equipment is compatible with the Shock Eliminator and the notched floating position.

18.1 Extract from the Front Loaders standard EN12525 + A2 2010:

"4.4.4 Protection against unintended lowering

If the front loader is also designed for lifting operations requiring the presence of someone near the load when the loader is in raised position, the hydraulic circuit of the lifting arm cylinders must be fitted with a safety device in compliance with Annex E, with the aim of preventing unintended lowering of the lifting arm, and which must remain active in the event of rupture of the power supply of the control circuit.
If this safety device can be put in on/off or enabled/disabled positions for operations that do not require the presence of someone near the load, then the following additional specifications apply:
– it must be possible to put the safety device into on/off or enabled/disabled position from the driver's cab;
– it must be possible to put the safety device into on or enabled position from the ground and not be near the load;
– the control for putting the safety device into off or disabled position must be designed and located so that the operator cannot actuate it unintentionally;
– the status (on/off or enabled/disabled) of the safety device must be clearly indicated and clearly visible from the driver's cab and from the loading area.
In compliance with 7.1.2, the correct operating method must be explained, including the warnings, in the instruction manual.
The loader must be fitted with a warning informing that for lifting operations requiring the presence of someone near the load, when the loader is in raised position, the safety device must be in the on position (actuated) (see 7.2).
Information for using front loaders that are not designed for lifting operations requiring the presence of an operator near the load when the loader is in raised position must comply with 7.1.4 and 7.2."

"Annex E (normative)

Test method and acceptance criteria for means to avoid unintended lowering

E.1 Terms and definitions

E.1.1
discharge device
hydraulic valves used to simulate a rupture of the loader's hydraulic piping.

E.1.2
test load
weight (50 ± 10)% of nominal lifting capacity specified by the manufacturer of the loader.

E.2 Test procedure
The test specified from E.2.1 to E.2.2 must be carried out according to each of the following conditions:
– position held after lowering the test load to a height of (1 ± 0.1) m (static test);
– position held after lifting the test load to a height of (1 ± 0.1) m (static test);
and at oil temperatures of the hydraulic system between 40°C and 50°C.

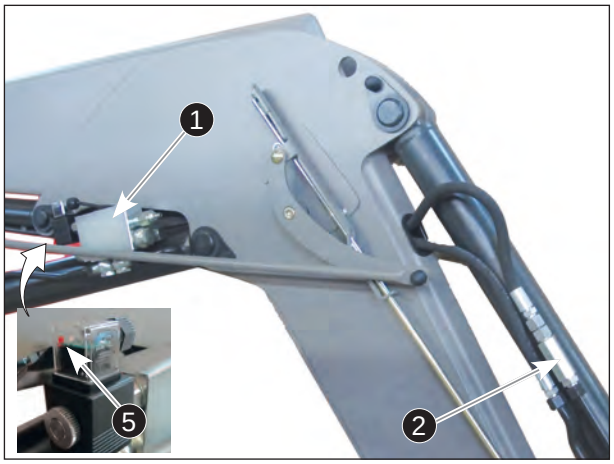
E.2.1 The discharge device between the lifting rams and the control valve must be open.

E.2.2 Complete lowering of the load must be measured at the implement's pivot point.

E.3 Acceptance criterion
Complete lowering measured in E.2.2, during the first 10 seconds must not exceed:
– 100 mm, in the event of a stop or manual disabling of the safety device;
– 300 mm, in the case of a continuously actuated safety device.
After 5 min, lowering must not exceed an additional 100 mm."

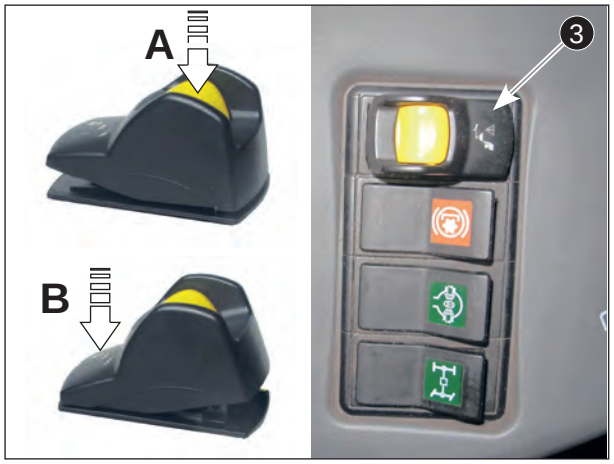
18.2 Use

The hydraulic circuit of the lifting and bucket rams is fitted with a safety device 1 and 2.



By default, the safety device is actuated.
As soon as the user presses the button in the cab 3 (secure button) the safety device is disabled and the red indicator lights come on:
– the button in the cab 3,
– the external button 4,
– the two solenoid valve connectors of the lifting rams 5.

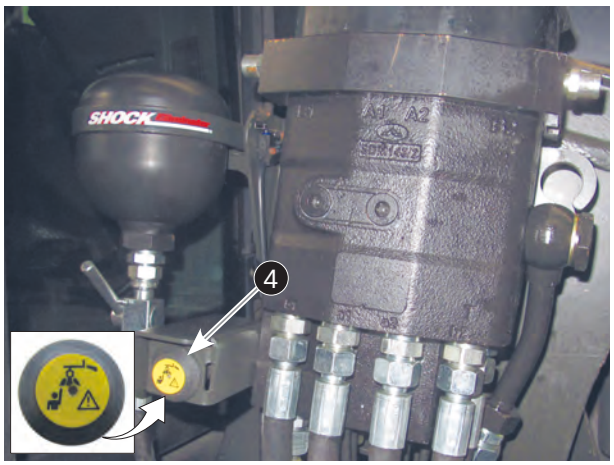
Button function 3:
– Press (A): safety device disabled.
– Press (B): safety device actuated.



CAUTION : disabling the safety device is only authorised when nobody is near the load. In this case, the floating position held and the Shock Eliminator are compatible.
By pressing buttons 3 or 4, the safety device is automatically actuated (red lights off).

Note : As soon as the tractor is switched off, the safety device is automatically actuated.

The button 4 is used exclusively to reactivate the safety device from the outside.
In this case, the red indicator lights go off.



19. MAINTENANCE

Change the tractor hydraulic oil and filters regularly in accordance with the tractor manufacturer recommendations. Used oil does not lubricate, it also contributes to the damage of all hydraulic components (pump, valves, rams…). Even clear oil may not lubricate.

For any maintenance operations made whilst the loader is the raised position, the loader must be locked into position.
Two possibilities :

— Lock the joystick in the cab (see chapter "CONTROL")

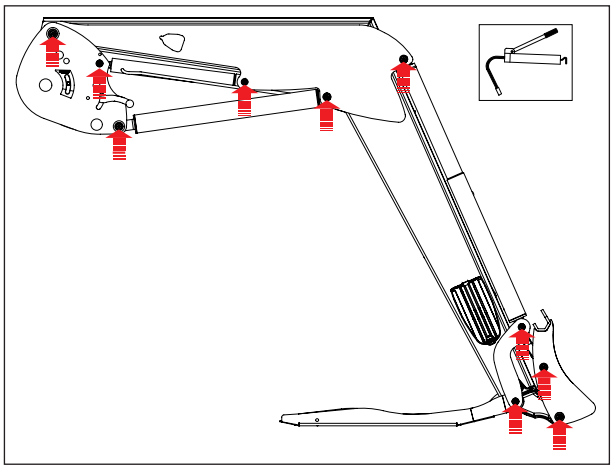
or,

— Disconnection of the MACH System if loader has one, or closing the tap fitted on the lifting coupler if the loader is without MACH System (see chapter "LOADER UNHITCHING").

When using a high presssure cleaner, do not direct water towards the electrical components.

Clean the implement and the loader front after each use. The acid from slurry, fertilisers and silage is harmful to paint, steel and the machine's pivot points.

Grease every 10 hours and after each wash (grease eliminates water) and particularly after washing with a high pressure cleaner.



Check the following each month, and more frequently when used intensively:

— Condition of the loader articulations. If necessary, replace the wear bushes and/or the pins.
— The wear bushes must be replaced if they are less than 1 mm thick.
— The tractor's hydraulic oil level and the sealing of the hydraulic system. If you notice any internal or external leaks on the hydraulic parts (rams, hoses, connectors, Mach, couplings, etc.), contact your dealer.
— Condition of the hoses: replace them if you notice any small cracks or oil.
— Correct operation of the monolever (cables, play, locking, etc.).
— Condition of the electric wiring. Please contact your dealer if there is any damage to connectors or cables.
— Mechanical condition (any cracking, deformation, fretting on stops, play, parking stands, etc.).
Please contact your dealer if there is any abnormal wear.

Check the tightness of the bracket after 10, 50 hours then every 100 hours or when carring out tractor maintenance. In case of untightness, please contact your dealer.

IMPORTANT:
All the screws needing to be retightened must be inspected, changed if necessary, cleaned and smeared with loctite.
Tighten the screws to the tightening torque specified in the table below.
Use of a pneumatic spanner to tighten the screws on the tractor is forbidden.

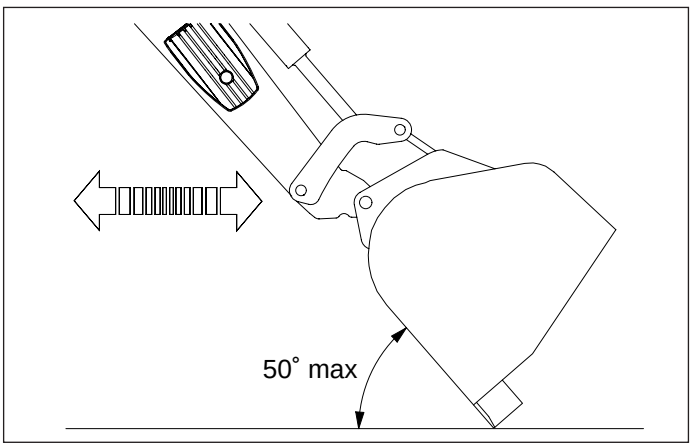
Tightening torque (Nm)

Thread	Class of bolt		
	8.8	**10.9**	**12.9**
M 8	21	29	35
M 10	42	58	70
M 12	72	101	121
M 14	114	160	193
M 16	174	245	295
M 18	240	340	405
M 20	340	475	570
M 22	455	640	765
M 30 x 150	500		
M 40 x 150	500		

20. GENERAL INFORMATION

— Each implement is designed for a specific use and has its own resistance limits.
— Land clearing and stump extraction are forbiden. Such work should be carried out by a specialist vehicle and is not possible for an agricultural loader.
— Use the tractor's power to enter in the material to be moved rather than approaching it with speed, which will generate high stress on tractor and loader.
— When the load to be manoeuvred is too heavy, do not apply force to the hydraulic components. This also applies when rams are fully closed or extended. Please release the control lever.

— When ground levelling, work at a slow speed with the implement at a maximum angle of 50° with respect to the ground.



Operate with flexibility and in a judicious manner.

21. CONTROL

Important: Never leave the tractor with loader in raised position.

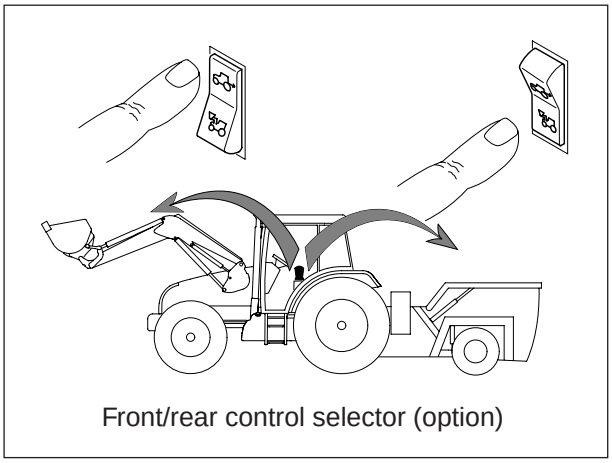
All spool valves produce an internal leak required for correct operation.

21.1 On tractor valves :

Please report to the tractor's instruction book.

21.1.1 Front/rear control selector (option) :

From the original joystick of the tractor, the operator can control the MX loader or the rear couplers from the cab.



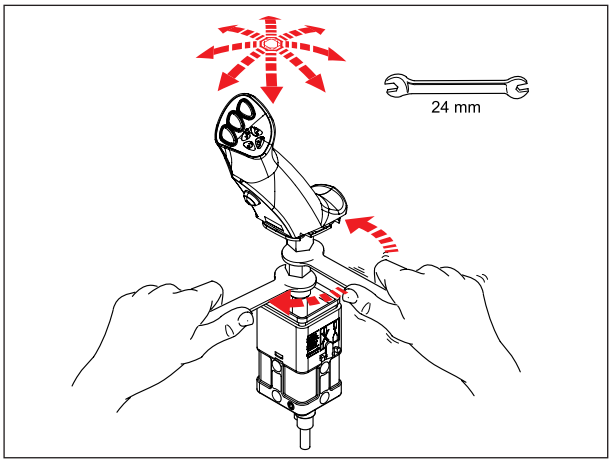
Front/rear control selector (option)

21.2 Control with MX PROPILOT control valve

21.2.1 Handle setting *

To ensure comfortable control over the loader, you can set the position of the handle.

* on Propilot and Flexpilot controls only.

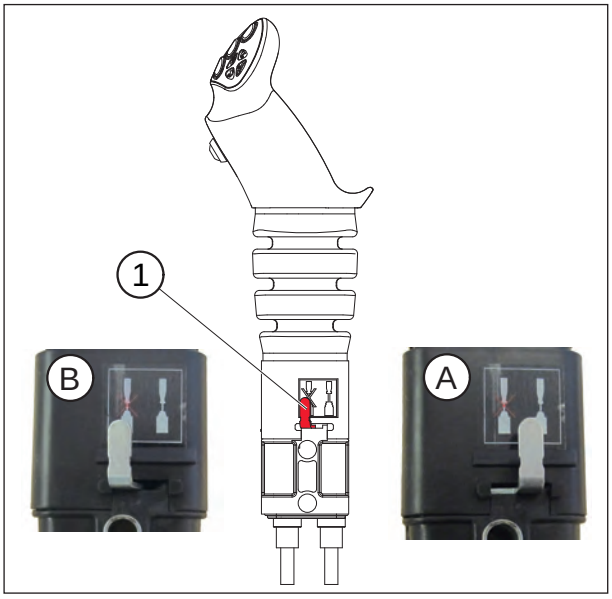


21.3 Control with MX PROPILOT control valve

21.3.1 Security

Involuntary loader manoeuvre can be avoided. The PROPILOT joystick can be locked.

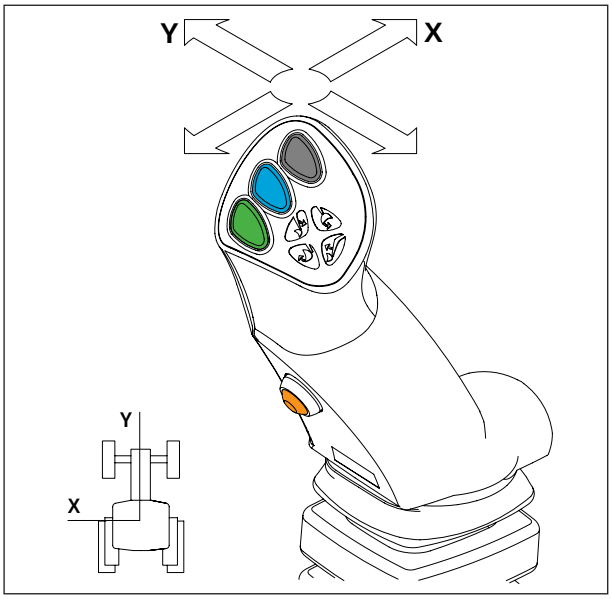
Move the unlocking lever (1).
— (A): released position.
— (B): locked position.



21.3.2 Movements

First function: along "Y" axis
— Forwards = loader lowered
(Double action of the hydraulic ram).
— Forwards after notch = floating position
(Single action of the hydraulic ram).
— Backwards = loader raised.

Second function: along "X" axis
— To the left = implement crowding.
— To the right = implement dumping.



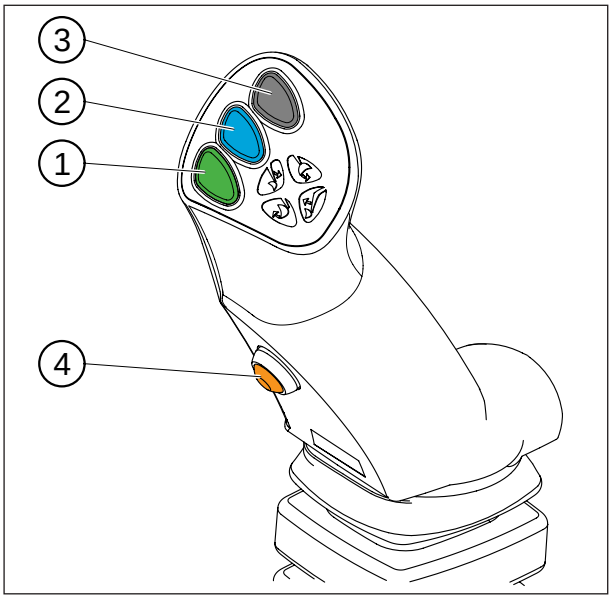
Third function: along "X" axis
— Button (1) + crowding or dumping movement.

Fourth function: along "X" axis
— Button (2) + crowding or dumping movement.

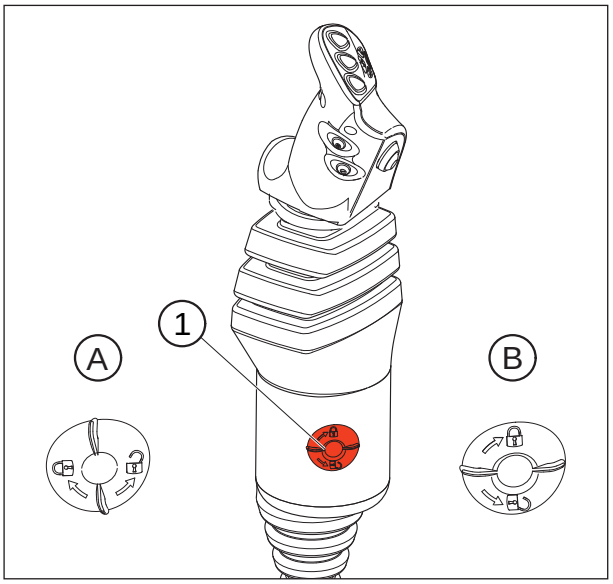
FAST-LOCK
Automatic hitching/unhitching of the implement.
— Button (1) + (4) + crowding or dumping movement.

SPEED-LINK 2
Automatic hitching/unhitching of the implement with hydraulic and electric functions.
— Button (1) + (4) + crowding or dumping movement.

Note :
Button (3) not used.
Button (4) only available in the case of the FAST-LOCK or SPEED-LINK 2 option.



21.4 Control with MX FLEXPILOT control valve

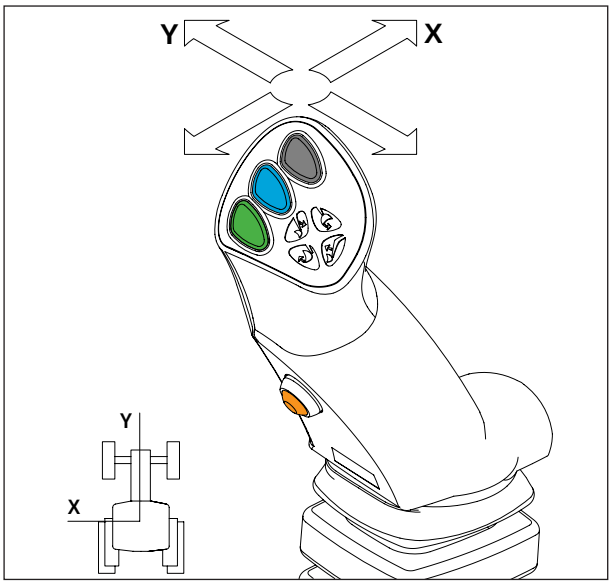


21.4.1 Security

Involuntary loader manoeuvre can be avoided. The FLEXPILOT joystick can be locked.

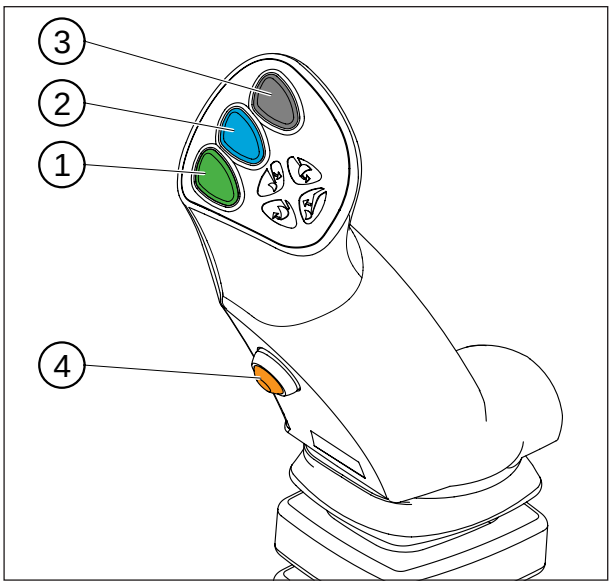
Turn the isolating thumbwheel (1):
— (A): released position.
— (B): locked position.

21.4.2 Movements



First function: along "Y" axis
— Forwards = loader lowered
(Double action of the hydraulic ram).
— Forwards after notch = floating position
(Single action of the hydraulic ram).
— Backwards = loader raised.

Second function: along "X" axis
— To the left = implement crowding.
— To the right = implement dumping.



Third function: along "X" axis
— Button (1) + crowding or dumping movement.

Fourth function: along "X" axis
— Button (2) + crowding or dumping movement.

FAST-LOCK
Automatic hitching/unhitching of the implement.
— Button (1) + (4) + crowding or dumping movement.

SPEED-LINK 2
Automatic hitching/unhitching of the implement with hydraulic and electric functions.
— Button (1) + (4) + crowding or dumping movement.

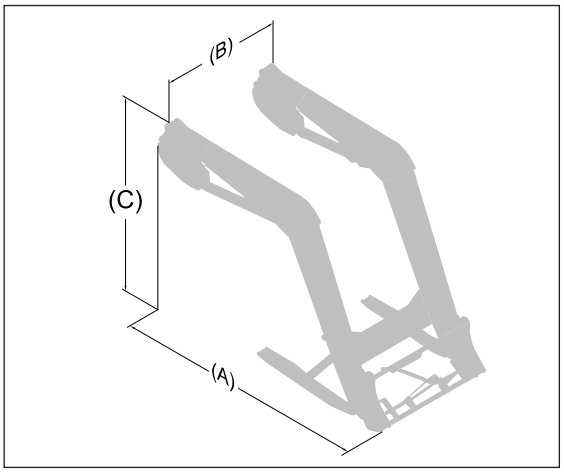
ACS
Implement position reset.
— Button (3).

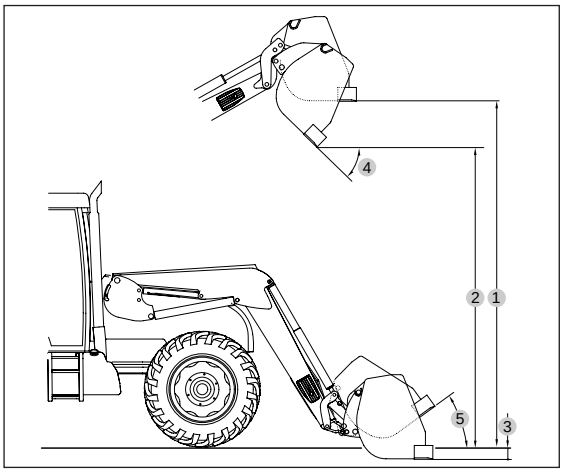
Note :
Button (4) operational only in the case of the FAST-LOCK or SPEED-LINK 2 option.

21.5 Control with MX TECHPILOT control valve

Please refer to Techpilot instruction book.

22. TECHNICAL SPECIFICATIONS





		MX T406	MX T408	MX T410	MX T412	MX T417	MX T418
Length (A)		2.30 m	2.40 m	2.50 m	2.60 m	2.75 m	2.75 m
Width (B)		1.18 m	1.18 m	1.18 m	1.18 m	1.38 m	1.38 m
Height (C)		1.72 m	1.78 m	1.83 m	1.87 m	2.05 m	2.05 m
Minimum weight (Without option) [MX T400 loaders]		460 Kg	480 Kg	535 Kg	550 Kg	720 Kg	757 Kg
Maximum weight (With option) [MX T400 loaders]		505 Kg	560 Kg	615 Kg	635 Kg	867 Kg	904 Kg
Minimum weight (Without option) [MX T400s loaders]		*522 Kg*	*542 Kg*	*597 Kg*	*612 Kg*	*782 Kg*	–
Maximum weight (With option) [MX T400s loaders]		*567 Kg*	*622 Kg*	*677 Kg*	*697 Kg*	*929 Kg*	–
Maximum height at implement pivot *		3.75 m	3.85 m	4.00 m	4.15 m	4.60 m	4.60 m
Maximum height under horizontal bucket (1) #		3.50 m	3.60 m	3.75 m	3.90 m	4.35 m	4.35 m
Maximum height under dumped bucket (2) #		2.95 m	3.05 m	3.20 m	3.35 m	3.80 m	3.80 m
Digging depth (3) #		0.20 m	0.20 m	0.20 m	0.20 m	0.20 m	0.20 m
Dumping angle at maximum height (4) #		52°	55°	55°	55°	50°	50°
Crowd angle (5) #		47°	52°	52°	52°	51°	51°
Lift force at implement pivo * (Kg)		1600 Kg	2100 Kg	2400 Kg	2720 Kg	3000 Kg	3000 Kg
Lift capacity at implement pivot over the entire lifting range * (Kg)		1250 Kg	1890 Kg	2190 Kg	2490 Kg	2670 Kg	2670 Kg
Payload on pallet 0.60 m in front of the forks							
At ground level (Kg)	Without PCH	1150 Kg	1350 Kg	1580 Kg	1770 Kg	1930 Kg	1930 Kg
	With PCH	1450 Kg	1800 Kg	2080 Kg	2360 Kg	2660 Kg	2660 Kg
At 2 m height (Kg)	Without PCH	1000 Kg	1300 Kg	1540 Kg	1750 Kg	1890 Kg	1890 Kg
	With PCH	1380 Kg	1720 Kg	2000 Kg	2250 Kg	2560 Kg	2560 Kg
At 3 m height (Kg)	Without PCH	900 Kg	1200 Kg	1470 Kg	1690 Kg	1850 Kg	1850 Kg
	With PCH	1350 Kg	1630 Kg	1980 Kg	2230 Kg	2460 Kg	2460 Kg
At maximum height (Kg)	Without PCH	860 Kg	1120 Kg	1450 Kg	1570 Kg	1750 Kg	1750 Kg
	With PCH	1350 Kg	1610 Kg	1960 Kg	2200 Kg	2350 Kg	2350 Kg
Lifting time (s)		3.9 sec	4.6 sec	5.4 sec	6.2 sec	8.2 sec	8.2 sec
Dumping time (s)		1 sec	1 sec	1 sec	1.4 sec	1.4 sec	1.4 sec

Specifications measured at 190 bar and a flow rate of 60 l/min.
Data varies depending on the type of tractor used.
Indicated data are with a loose material bucket.
**** Values at ground level and at implement pivot are not considered to be working data.***

DECLARATION OF CONFORMITY CE

We, the manufacturers :

MX
19,Rue de Rennes
F - 35690 Acigné

Declare that the products:

MX T406, MX T408, MX T410, MX T412, MX T417, MX T418 loaders
MX T406s, MX T408s, MX T410s, MX T412s, MX T417s loaders

Comply with standard EN 12525 + A2 2010, which presupposes compliance with the requirements of directive 2006/42 EC of the European Parliament and of the Council of 17 May 2006 on machinery.

Acigné, the 10th of January 2013.

Loïc Mailleux
Technical Manager

19, rue de Rennes
BP 83221
F - 35690 ACIGNE
Tel.: +33 (0)2 99 62 52 60
Faks: +33 (0)2 99 62 50 22
E-mail: contact@m-x.eu